

Please type a plus (+) sign inside this box -

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PTO/SB/05 REV 1 (12/97)

Approved for use through 09/30/2000. omb 0651-0032
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

UTILITY PATENT APPLICATION TRANSMITTAL

(Only for new nonprovisional applications under 37 CFR 1.53(b))

Attorney Docket No.

SJO920000165US2

First Inventor or Application Identifier

Ho et al

Title

READ HEAD HAVING A TUNNEL JUNCTION SENSOR WITH A
FREE LAYER BIASED BY EXCHANGE COUPLING WITH
INSULATING ANTIFERROMAGNETIC (AFM) LAYERS

Express Mail Label No.

EL 749517939 US

APPLICATION ELEMENTS

See MPEP chapter 600 concerning utility patent application contents.

ADDRESS TO:

Mail Stop: Patent Application
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

1. ☒ Fee Transmittal Form
(Submit an original, and a duplicate for fee processing)

2. ☒ Specification [Total Pages 20]

(preferred arrangement set forth below)

- Descriptive title of the invention
- Cross References to Related Applications
- Statement Regarding Fed sponsored R & D
- Reference to Microfiche Appendix
- Background of the invention
- Brief Summary of the invention

- Brief Description of the Drawings (if filed)

- Detailed Description

- Claim(s)

- Abstract of the Disclosure

3. ☒ Drawing(s) (35 USC) 113 [Total Sheets 11]

4. ☒ Oath or Declaration [Total Pages 2]

a. ☐ Newly executed (original or copy)

b. ☒ Copy from a prior application (37 CFR 1.63(d))

(for continuation/divisional with Box 17 completed)

(Note Box 5 below)

i. ☐ DELETION OF INVENTOR(S)

Signed statement attached in the prior application, see
37 CFR 1.63(d)(2) and 1.33(b).

5. ☒ Incorporation by Reference (useable if Box 4b is checked)

The entire disclosure of the prior application, from which a copy
of the oath or declaration is supplied under Box 4b, is considered
as being part of the disclosure of the accompanying application
and is hereby incorporated by reference therein.

6. ☐ Microfiche Computer Program (Appendix)

7. ☐ Nucleotide and/or Amino Acid Sequence Submission

(if applicable, all necessary)

a. ☐ Computer Readable Copy

b. ☐ Paper Copy (identical to computer copy)

c. ☐ Statement Verifying identity

ACCOMPANYING APPLICATION PARTS

8. ☐ Assignment Papers (cover sheet & document(s))

9. ☐ 37 CFR 3.73(b) Statement

(when there is an assignee) ☐ Power of Attorney

10. ☐ English Translation Document (if applicable)

11. ☒ Information Disclosure Statements ☐ Copies of
(IDS) w/PTO-1449 & PTO-892 IDS Citations

12. ☒ Preliminary Amendment

13. ☒ Return Receipt Postcard (MPEP 503)

(Should be specifically itemized)

14. ☐ Small Entity ☐ Statement filed in prior application,
Statement(s) ☐ Status still proper and desired

15. ☐ Certified Copy of Priority Document(s)

(if foreign priority is claimed)

16. ☒ Other: Express Mail Certification

17. If a CONTINUING APPLICATION, check appropriate box and supply the requisite information:

☐ Continuation ☒ Divisional ☐ Continuation-in-part (CIP) of prior application No.: 10/054,656

Prior application information: Examiner W. J. Klimowicz Group/Art Unit 2652

18. CORRESPONDENCE ADDRESS

☐ Customer Number or Bar Code Label or ☒ Correspondence address below

(Insert Customer No. or Attach bar code label here)

ADDRESS

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IP Law L2PA/010
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San Jose, California 95193

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(Ervin F. Johnston)

FAX: 808-661-9797

COUNTRY

USA

Name (Print/Type)

Ervin F. Johnston

Registration No. (Attorney/Agent)

20,190

Signature

Date

April / 72004

Please type a plus (+) sign inside this box -

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<div style="display: flex; align-items: center;"> <div> <p>16569</p> <p>PTO</p> </div> </div> <p style="text-align: center; margin-top: 10px;">FEE TRANSMITTAL</p> <p><i>Patent fees are subject to annual revision on October 1. These are the fees effective November 10, 1998. Small entity payments must be supported by a small entity statement, otherwise large entity fees must be paid. See Forms PTO/SB/09-12 See 37 C.F.R. §§ 1.27 and 1.28</i></p>		Complete If Known	
		Application Number	(unknown)
		Filing Date	(herewith)
		First Named Inventor	Ho et al
		Examiner Name	(unknown)
TOTAL AMOUNT OF PAYMENT		(\$)	996.00
Group / Art Unit		(unknown)	
Attorney Docket No.		SJO920000165US2	

METHOD OF PAYMENT (check one)	FEE CALCULATION (continued)																																																																																																																																																																																																				
<p>1. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any overpayment to:</p> <p>Deposit Account Number <u>09-0466</u></p> <p>Deposit Account Name <u>International Business Machines Corp.</u></p> <p><input checked="" type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17</p> <p><input type="checkbox"/> Charge the Issue Fee Set in 37 CFR 1.18 at the Mailing of the Notice of Allowance. 37 CFR 1.311(b)</p> <p>2. <input type="checkbox"/> Payment Enclosed:</p> <p><input type="checkbox"/> Check <input type="checkbox"/> Money Order <input type="checkbox"/> Other</p> <p style="text-align: center;">FEE CALCULATION</p> <p>1. BASIC FILING FEE</p> <table style="width: 100%;"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>101 770</td><td>201 385</td><td>Utility filing fee</td><td><u>770.00</u></td></tr> <tr><td>106 340</td><td>206 170</td><td>Design filing fee</td><td></td></tr> <tr><td>107 530</td><td>207 265</td><td>Plant filing fee</td><td></td></tr> <tr><td>108 770</td><td>208 385</td><td>Reissue filing fee</td><td></td></tr> <tr><td>114 160</td><td>214 80</td><td>Provisional filing fee</td><td></td></tr> <tr><td colspan="3" style="text-align: right;">SUBTOTAL (1) (\$)</td><td><u>770.00</u></td></tr> </tbody> </table> <p>2. 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SUBMITTED BY		COMPLETE (if applicable)	
Typed or Printed Name	Ervin F. Johnston	Reg. Number	20,190
Signature		Date	April 17, 2004

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Ervin F. Johnston

NAME



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